Desirable dietary patterns for health

in Saudi Arabia

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Abstract

Although Saudi Arabia has high food availability, yet some degree of malnutrition and diet related chronic diseases are prevalent. The recent rapid changes in lifestyle and dietary habits have led to great changes in dietary pattern. The average per caput energy derived from fat, sugar, animal products, fruits and vegetables, cereals and pulses and beans at national level were 172%, 194%, 72%, 307%, 171% and 22% of the desirable levels respectively. The availability of total calories (per caput) was 135% of the national requirement and the dietary score of the national diet was 90. A desirable dietary pattern in terms of food groups, to meet the nutritional requirements not only from the point of view of nutrients but also from stand point of bulk and palatability at national level, good health and lowering the risk of chronic diseases, has been developed.
Introduction

Despite high food availability for consumption and diversification of diet in Saudi Arabia, some degree of malnutrition in pre-school children and increasing trends in diet-related chronic diseases in other population groups due to imbalance of diet, sedentary lifestyle and ignorance have been reported (1–3). A balanced diet at national level and dietary indicators to measure its nutritional quality are desirable to achieve better health and working efficiency. Recently, FAO (4) developed a dietary scoring system based on the proportions of the total calories derived from food groups to measure the nutritional quality of the dietary patterns at national level. Some countries such as Australia, Japan, New Zealand, India and Pakistan have already made recommendations for developing dietary pattern in terms of food group [4-6]. Such dietary patterns can guide agriculture and health planners to ensure balance of nutrients in the diet for promoting good health and lowering the risk of chronic diseases. The precise proportions of various food groups to be included in a diet to make it wholesome, nutritional and palatable have not been defined and dietary guidelines to formulate a balanced diet at national level do not exist in Saudi Arabia. The present paper deals with the food availability situation and development of desirable dietary patterns for Saudi Arabia.
Food Availability

Food availability from various food groups in Saudi Arabia in terms of calories per capita per day as average for the years 1993-95, compared with FAO desirable levels [4] and the nutritive value of the diet are shown in Table 1.

Plant foods

Cereals constitute the main staple of Saudi diet and provide 50% of the total available calories. However, the consumption was 171% of the desirable level during this period (Table 1). Pulses and beans play an important role in improving the nutritive value of the diet rich in cereals. The calories from pulses and beans were low and were 22% of the desirable level. Nutritionally cereals and pulses are complementary [7, 8]. Cereals and pulses provide not only the principal source of starch but also provide useful fibre in preventing constipation, diabetes and hypercholesterolemia. Resistant starch in plant foods also acts like dietary fibre and may reduce the risk of cancer [9]. The calories from roots and tubers and nuts and oils seeds were 29% and 23% of the desirable levels respectively. Vegetables and fruits are nutritionally desirable and have protective role in preventing stroke and the development of cancers. These are relatively low in energy but high in fibre, vitamins and minerals. The consumption of calories from vegetables and fruits was very high and provided 307% of the desirable level (Table 1). However, vegetables